Neutron reactions and climate uncertainties earn Los Alamos scientists DOE Early Career awards

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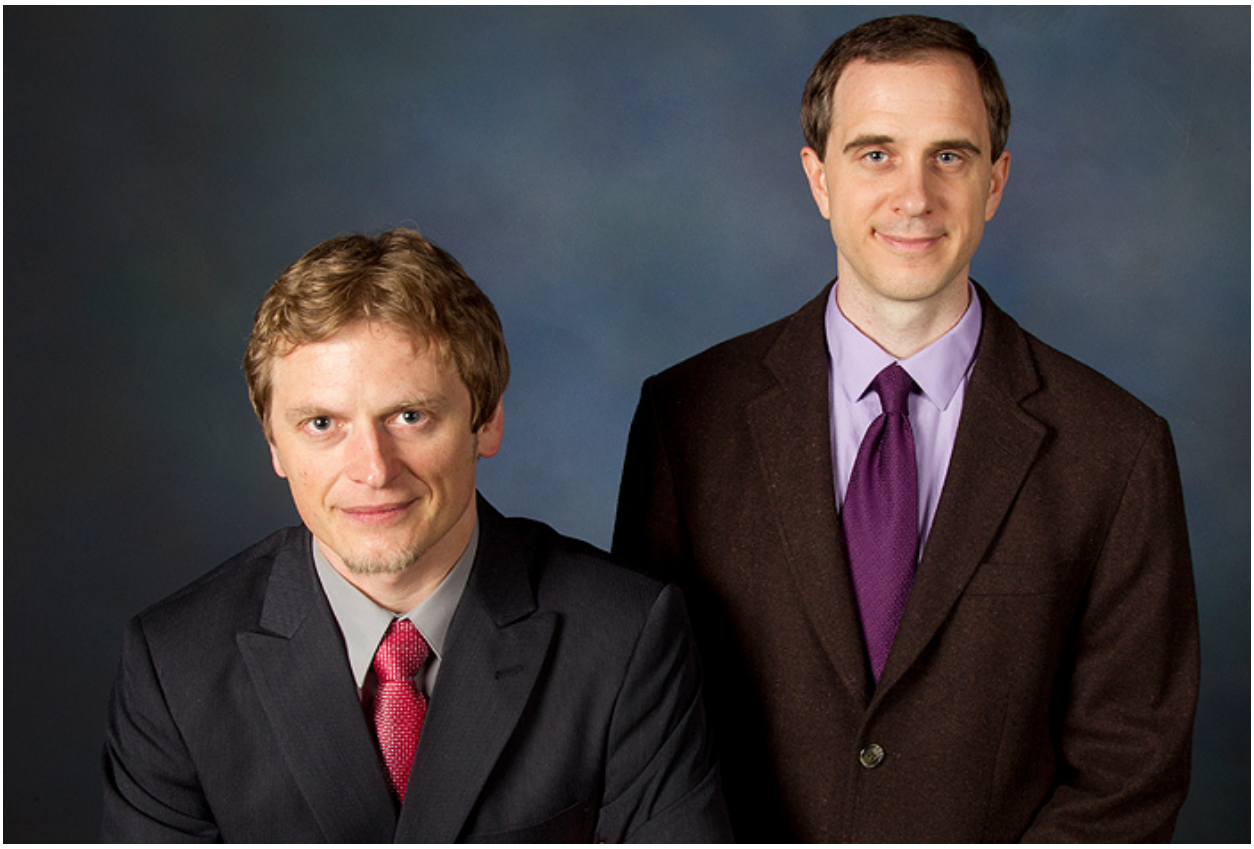

LOS ALAMOS, N.M., May 10, 2013—Two Los Alamos National Laboratory researchers are among the 61 national recipients of the Energy Department’s Early Career Research Program awards for 2013.

Marian Jandel won for his proposal, “New Data on Neutron Reactions Relevant to Basic and Applied Science,” selected by the Office of Nuclear Physics.

Nathan M. Urban will be supported for his work on “Beyond the Black Box: Combining System and Model Dynamics to Learn About Climate Uncertainties,” selected by the Office of Biological & Environmental Research.

The Early Career Research Program, now in its fourth year, is designed to bolster the nation's scientific workforce by providing support to exceptional researchers during the crucial early career years, when many scientists do their most formative work.

“The Early Career Research Program reflects the Administration's strong commitment to creating jobs and new industries through scientific innovation,” said Acting Energy Secretary Poneman. “Strong support of scientists early in their careers is crucial to sustaining America's scientific workforce and assuring U.S. leadership in discovery and innovation for many years to come.”

“Marian and Nathan are excellent examples of the intellectual vitality here at Los Alamos,” said Director Charlie McMillan. “The early career awards are a great honor for them and the Laboratory. I congratulate them both and look forward to seeing results of their research.”

Under the program, researchers based at the Department’s national laboratories will get $500,000 per year to cover year-round salary plus research expenses. The funding is for the first year of planned five-year research grants, subject to congressional appropriations.

About the winnersMarian Jandel received a doctorate in nuclear physics in 2003 from Comenius University, Bratislava, Slovakia. During his PhD he was a visiting scientist at Flerov Laboratory of Nuclear Reactions, JINR, Dubna, Russia, where he studied ternary fission and heavy ion fusion-fission nuclear reactions leading to superheavy elements. He then became a post-doc at the Cyclotron Institute, Texas A&M University, where he was involved in the research of nuclear reaction mechanisms at intermediate energies and radioactive ion beam production.

Jandel joined LANL in 2006 as a post-doctoral researcher and became a staff scientist in 2009. His research has been focusing on precise measurements of neutron-induced fission and radiative capture, using the Detector for Advanced neutron Capture Experiments (DANCE) and Lead Slowing Down Spectrometer (LSDS) at LANSCE. In 2007, he received a LANL distinguished performance award as a member of the National Technical Nuclear Forensics Simulation Team. In 2012, he was recognized by the Los Alamos Chemistry Division for the development of a new technology (patent pending) for large-area neutron detectors.

Nathan Urban received his Ph.D. in computational condensed matter physics in 2006 from the Pennsylvania State University. He changed his research focus to climate prediction and uncertainty quantification with postdoctoral appointments in geosciences at Penn State and public and international affairs at Princeton University. He joined Los Alamos in December 2011 in the Energy Security Center (Institutes Office), and now resides in Computational Physics and Methods.

As the laboratory's first Energy Security Fellow, his activities at Los Alamos bridge physical science, computational modeling, statistics, decision making and policy. His current research areas include quantifying uncertainty in climate feedbacks, ice sheet dynamics, sea level rise, and forecasting ocean climate variability, as well as decision making under uncertainty and learning. He is also involved in coordinating laboratory planning and initiatives related to energy-climate impacts.

About the Awards

Awardees were selected from a pool of 770 university- and national laboratory-based applicants. To be eligible for the award, a researcher must be an untenured, tenure-track assistant or associate professor at a U.S. academic institution or a full-time employee at a national laboratory who has received a Ph.D. within the past ten years. Research topics are required to fall within one of the Energy Department's Office of Science's six major focus areas:

- Advanced Scientific Computing Research
- Basic Energy Sciences
- Biological and Environmental Research
- Fusion Energy Sciences
- High Energy Physics
- Nuclear Physics

See the full list of recipients at the DOE Office of Science site.